DRAFT FISH AND WILDLIFE COORDINATION ACT REPORT
BOGUE BANKS SHORE PROTECTION PROJECT
CARTERET COUNTY, NC

Raleigh Ecological Services Field Office
U.S. Fish & Wildlife Service

Under the supervision of
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EXECUTIVE SUMMARY

Bogue Banks is a complex barrier island composed of old beach ridges and dune fields (Moslow and Heron 1994, Riggs 2002). The island is not dominated by overwash processes, instead having some of the highest interior elevations of any North Carolina barrier island. The maritime forest and freshwater wetland communities within this high dune ridge and swale topography are of high value (resource category of 2) to fish and wildlife resources. The estuarine shoreline and Bogue Sound also provide high value (resource category of 2) to fish, shellfish, and wildlife resources in the project area, containing waters designated as Outstanding Resource Waters (ORW) in the western portion of Bogue Sound and as a Habitat Area of Particular Concern (HAPC) throughout the sound. Bogue Inlet to the west is of high value (resource category of 2) due to its scarcity as a comparably undisturbed tidal inlet in North Carolina. Beaufort Inlet to the east of the island is disturbed by a deep navigational channel and regular maintenance dredging, reducing its value to a more abundant, high to medium value (resource category of 3) to fish and wildlife resources. The nearshore and offshore marine areas are of high value (resource category of 2) to commercially and recreationally important fisheries, hardbottoms, artificial reefs, marine mammals, sea turtles and a productive benthic community.

A dredge and fill project to stabilize the oceanfront shoreline of Bogue Banks is more likely to be successful than for most other locations in North Carolina. The habitat value of the potential beach fill area is medium to low (resource category of 4), and several dredge and fill projects are occurring already. Relatively low erosion rates and high island elevation create a more durable system for beach nourishment than other low-lying, overwash-dominated barrier islands in the state.

Although adverse environmental impacts can result from dredge and fill projects, many of these impacts can be avoided and minimized. For those impacts that cannot be avoided, mitigation measures are available to offset those impacts. These conservation measures are discussed in Section 10.

Implementation of the conservation measures recommended within this report should create an ecologically sound shore protection project for Bogue Banks that avoids and minimizes damages to fish and wildlife resources. A dredge and fill project that utilizes ecologically compatible fill materials and avoids disturbing new seabeds would be the least environmentally damaging alternative and one we would support. Avoiding known fishing grounds and beach seining seasons would minimize damages to the local fishing industry, as would minimizing impacts to the prey base for those fishery resources. If these measures could be implemented, the Service would support a dredge and fill project on Bogue Banks.